

THE INVENTION CLAIMED IS:

1. A connector for connecting a cable to a printed wiring board comprising:
a dielectric housing;
5 a conductive signal contact mounted on said housing and adapted for mating with
a signal conductor of the cable; and
a spring connector connected to said housing, said spring connector having signal
means for connecting said signal contact on said housing to a signal contact on the
printed wiring board.
- 10 2. A connector as defined in claim 1, wherein said spring connector is a
separate member from said housing, such that said spring connector can be engaged and
disengaged from said housing, said spring connector including a body and said signal
means comprises a conductive signal terminal provided in said body.
- 15 3. A connector as defined in claim 2, wherein a portion of said signal
terminal is capable of flexing relative to said body when the connection between said
signal terminal and said signal contact on said housing is made.
- 20 4. A connector as defined in claim 3, wherein said signal terminal is curved
in an unflexed position.
- 25 5. A connector as defined in claim 2, further including a ground shield
attached to said housing, said spring connector including ground means for connecting
said ground shield to a ground contact on the printed wiring board.
- 30 6. A connector as defined in claim 5, wherein said ground means comprises
a conductive ground terminal provided in said body.
7. A connector as defined in claim 6, wherein a portion of said ground
terminal is capable of flexing relative to said body when the connection between said
ground shield and the ground terminal on the printed wiring board is made.

8. A connector as defined in claim 6, wherein said ground terminal is electrically isolated from said signal terminal in said body.

9. A connector as defined in claim 1, wherein said means comprises a
5 deflectable arm.

10. A connector as defined in claim 9, further including a ground shield attached to said housing and said deflectable arm is formed as part of said ground shield.

10 11. A connector as defined in claim 10, wherein said deflectable arm has a dimple thereon for engagement with a ground terminal on the printed wiring board.

12. A connector as defined in claim 1, wherein said housing has a receptacle provided therein having openings on two sides thereof into which the printed wiring
15 board can be inserted.

13. A connector as defined in claim 12, wherein said signal contact is mounted at approximate the centerpoint of the receptacle.

20 14. A connector as defined in claim 1, further including a ground shield attached to said housing.

15. A connector as defined in claim 14, wherein said housing and said ground shield define a receptacle having openings on two sides thereof into which the printed
25 wiring board can be inserted, and wherein when the printed wiring board is inserted therein, portions of the printed wiring board extend out from both sides of the connector.

16. A connector as defined in claim 15, wherein said signal contact is generally T-shaped and is mounted at approximate the centerpoint of the receptacle.

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17. A connector as defined in claim 16, further including ground contacts provided on said housing on opposite sides of said signal contact and means for

connecting said ground contacts with said ground shield.

18. A connector as defined in claim 17, further including a conductive layer provided between the housing and said ground shield.

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19. A connector as defined in claim 14, wherein said ground shield includes an opening through which the cable is inserted, said opening having a first section which is larger than the cable to allow the cable to be freely inserted therein and second section which is smaller than the cable into which the cable can be inserted, thereby causing a secure connection between a ground conductor of the cable and said ground shield.

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20. A connector as defined in claim 19, further including a tapered section between said first and second sections of said opening.

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21. A connector as defined in claim 14, wherein said ground shield includes a pair of wings capable of being attached to a guide rail in a device.

22. A connector as defined in claim 21, wherein said wings have convolutions thereon.

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23. A connector as defined in claim 1, wherein said signal contact is generally T-shaped.

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24. A connector as defined in claim 23, further including a ground shield attached to said housing and ground contacts provided on said housing on opposite sides of said T-shaped signal contact, said ground contacts being electrically connected to said ground shield.

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25. A connector as defined in claim 1, wherein said housing includes a passageway therein into which at least a portion of the cable is inserted.

26. A connector as defined in claim 25, wherein said signal contact extends into said passageway.

27. A connector as defined in claim 25, wherein said passageway includes a plurality of ribs therein for gripping the cable.

28. A connector as defined in claim 25, further including a ground shield attached to said housing.

10 29. A connector as defined in claim 28, wherein a portion of said passageway has a conductive material therein, said conductive material being electrically connected to said ground shield.

15 30. A connector as defined in claim 28, wherein a portion of said passageway has a conductive material therein, and a portion of said housing has a conductive material thereon, said conductive material in said passageway being electrically connected to said conductive material on said housing, and said conductive material on said housing being electrically connected to said ground shield.

20 31. A connector as defined in claim 25, wherein said housing is formed by first and second bodies which are joined together.

32. A connector as defined in claim 31, further including a ground shield which joins said first and second bodies together.

25 33. A connector as defined in claim 32, wherein said ground shield includes a pair of arms for joining said first and second bodies together.

30 34. A connector as defined in claim 32, wherein said ground shield includes a pair of wings capable of being attached to a guide rail in a device, said wings including convolutions thereon.

35. A connector as defined in claim 1, further including at least one protrusion formed of a dielectric material on the housing proximate to the signal contact.

36. A connector as defined in claim 1, wherein said housing defines a receptacle having openings on two sides thereof into which the printed wiring board can be inserted, and wherein when the printed wiring board is inserted therein, portions of the printed wiring board extend out from both sides of the connector.

37. A connector for connecting a cable to a printed wiring board comprising:
10 a ground shield;
 a dielectric housing connected to said ground shield;
 a conductive signal contact mounted on said housing and adapted for mating with
 a signal conductor of the cable; and
 a pair of ground contacts mounted symmetrically on the housing and electrically
15 connected to the ground shield.

38. A connector as defined in claim 37, further including a plurality of plated through apertures provided through the housing for providing the electrical connection from the ground contacts to the ground shield.

20 39. A connector as defined in claim 37, wherein the signal contact is generally T-shaped and generally centrally located on the housing.